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Contributions to the Study of Bagrid fishes.

XI. Designation of a Lectotype for *Macrones argentivittatus* Regan with notes on some Bagrid species in the collections of the Natural History Museum, Genève

by

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With one plate

INTRODUCTION

Dr. Volker Mahnert, Curator of Lower Vertebrates, Muséum d'Histoire naturelle, Genève sent two lots of siluroid fishes for identification and return. The specimens are interesting in that some of them represent species of bagrid fishes hitherto poorly described, or not well illustrated. Further, the syntype material of *Macrones argentivittatus* Regan, 1905 are also available for selection of a lectotype and redescription of the species. This paper presents this besides notes on some interesting bagrid species.

I am much indebted to Dr. Mahnert for kindly letting me examine the specimens of his Museum. My thanks are due to the Director, Zoological Survey of India for permission to examine this material. The photographs have been taken by Shri S. Vijayaraghavan, of the Southern Regional Station, Zoological Survey of India, Madras to whom also my thanks are due.

LECTOTYPE DESIGNATION

REGAN (1905) described *Macrones argentivittatus* from three examples 39 to 41 mm in standard length. All these three original specimens on which Regan

based his description are present in the collections of the Muséum d'Histoire naturelle, Genève and bear the registration number MHNG 677.99. The type locality as seen from the label is "Chine, Cungkun, Canton, sur la rivière de l'Est, IX. 1903, Miss. Kühne". They are mentioned as "TYPES de *Macrones argentivittatus*". All the three specimens are fairly in good state of preservation.

Of the three specimens, the one which is 40 mm in standard length, in which the fin rays are clearly discernible and not much damaged (except the caudal) is hereby designated as the Lectotype. Regan's description is rather generalised and from the published data none of the three specimens can be determined as the one which could have been the basis of REGAN's description. REGAN's published illustration (Pl. 5, fig. 2) bears greater resemblance to the specimen now designated as Lectotype than to the remaining two specimens. The remaining two specimens are designated as Para-Lectotypes. The species is redescribed below. The description is based on all the three specimens, unless otherwise stated. The average is given first followed by the range within brackets.

***Mystus argentivittatus* (Regan)**

Macrones argentivittatus REGAN, *Revue suisse Zool.*, 13: 390, pl. v, fig. 2, 1905 (type locality, "China").

Aoria argentivittata, NICHOLS, *Freshw. Fish. China in Nat. Hist. Cent. Asia*, 9: 37, 1943 (name only).

Mystus (Mystus) argentivittata, JAYARAM, *Rec. Indian Mus.*, 51 (4): 554 1955 (distribution). — JAYARAM, *Int. Revue ges. Hydrobiol.*, 51 (3): 446, 1966 (name only). — JAYARAM, *Treubia*, 27 (2-3): 294, 1968 (generic position).

Specimens studied. — MHNG 677.99, China, Cungkun, Canton, sur la rivière de l'est, IX. 1903, Coll. Miss. Kühne, one example, Lectotype, 40 mm. standard length.

MHNG 677.99, same data as above two examples, Paralectotypes, 37 and 38 mm. standard length.

Description. — Body depth 3.496 (3.33 to 3.80); head length 3.72 (3.62 to 3.89); head width 4.69 (4.63 to 4.75); head depth 4.435 (4.21 to 4.63); predorsal length 2.45 (2.35 to 2.53); postdorsal length 1.52 (1.48 to 1.57); prepelvic distance 2.05 (2.0 to 2.10), all in standard length. Eye 3.44 (3.17 to 3.66) in head length, 1.27 (1.16 to 1.33) in interorbital space width, 1.32 (1.13 to 1.50) in snout length. Dorsal spine 1.29 (1.10 to 1.40), pectoral spine 1.07 (0.95 to 1.17) in head length. Adipose dorsal fin base 1.33 (1.1 to 1.46) in anal fin base. Least depth of caudal peduncle 1.53 (1.30 to 1.80) in its length. Dorsal fin I, i, 5; I, i, 6; Pectoral fin I, i, 5; I, i, 5; I, i, 6; pelvic fin i, 5; i, 5; i, 5; Anal fin and caudal fin rays could not be accurately counted.

Median longitudinal groove on dorsal surface of head extends as a long indistinct single fontanelle. Occipital process subcutaneous, 1.0 or 1.5 times longer than broad at base, extending to predorsal plate. Premaxillary band of teeth 4 or 4.5 times as long as broad; teeth on palate in a semilunar uninterrupted band, on lower jaw in two deeply curved bands separated in the middle; all teeth villiform. Maxillary barbels reach $\frac{3}{4}$ pectoral spine, nasal pair posterior end of median fontanelle, outer mandibular pair reach $\frac{1}{4}$ pectoral spine length, inner mandibular pair upto isthmus: all barbels thin, not very fleshy; outer and inner mandibular barbels inserted at different levels. Longest ray of dorsal fin not extending to adipose fin when depressed; dorsal spine with about 9 downward facing feeble serrations. Pectoral spine with 9 or 10 antrorse teeth along inner edge. Pelvic fins just reach anal fin. Longest anal ray not extending to caudal fin. Caudal fin damaged, but as per original description forked. Lateral line curved over pectoral fin, in a discontinuous line.

Colour. — Pale brown along sides and body, lighter beneath. A faint dark stripe along lateral line indistinctly seen.

Distribution. — China: Canton. Not recorded so far from anywhere else.

Remarks. — In an earlier paper (JAYARAM, 1968, p. 294) it was observed that this species along with five other species are relic species of the genus *Mystus* Scopoli which is fastly disappearing from China, being replaced by *Pelteobagrus* Bleeker. As NICHOLS (1943) aptly stated the recognition of the two genera *Pelteobagrus* and *Mystus* is a matter of convenience. It would seem taxonomically convenient, geographically appropriate to include this species under *Pelteobagrus* with which it possesses all the relevant characters, such as the anal fin ray count (14 or 15) and distribution in China. I am deferring this for a subsequent communication as I have not yet had the opportunity to examine the other five species which are:

Aoria amemiyae Kumura

Macrones chinensis Steindachner

Aoria corsula Chu

Macrones pluriradiatus Vaillant

Macrones sinensis Bleeker

***Mystus pelusius pelusius* (Solander)**

Silurus pelusius RUSSELL, *Nat. Hist. Aleppo*, 2: 210, pl. 7, fig. 1, 1794.

Bagrus halepensis Heckel in Russuger's *Reisen in Europa Asien und Africa*, 1: 1091, pl. 8, fig. 2, 1841.

Macrones aleppensis, GÜNTHER, *Cat. Fish. Brit. Mus.*, V: 75, 431, 1864.

Mystus (Mystus) pelusius, JAYARAM, *Rec. Indian Mus.*, 51 (4): 552, 1955 (synonymy).—JAYARAM, *Int. Revue ges. Hydrobiol.*, 51 (3): 446 (name only).

Specimen studied. — MHNG 603.95, Lake Antioche, Syria, one example, 116 mm. Standard length.

Description. — Body depth 4.83; head length 4.14; head width 4.73; head depth 5.52; predorsal length 2.698; postdorsal length 1.59; prepelvic distance 1.97, all in standard length. Eye 5.60 in head length, 1.8 in interorbital space width, 2.2 in snout length. Dorsal spine 1.87, pectoral spine 1.65 in head length. Adipose dorsal fin base longer than anal fin base, 0.405 in proportion. Least depth of caudal peduncle 1.79 in its length. Dorsal fin I, i, 6; pectoral fin I, 7; pelvic fin i, 5; anal fin ii, 8, caudal fin $8 + 7 = 15$.

Median longitudinal groove on dorsal surface of head extending to occipital base, as a long single fontanelle. Occipital process subcutaneous, 3.0 times longer than broad at base, extending to predorsal plate. Premaxillary band of teeth 5.0 times longer than broad; teeth on palate in a semilunar uninterrupted band, on lower jaw in two deeply curved bands separated in the middle, all teeth villiform. Maxillary barbels reach nearly end of pectoral spine, nasal pair anterior border of eye, outer mandibular pair pectoral fin base, inner mandibular pair isthmus; all barbels thin, not very fleshy; outer and inner mandibular barbels inserted at different levels. Longest ray of dorsal fin not extending to adipose fin when depressed; dorsal spine smooth. Pectoral spine short, with eight antrorse teeth along inner edge. Pelvic fins do not reach anal fin. Longest anal ray not extending to caudal fin. Caudal fin forked, lobes overlapping, upper lobe slightly longer. Lateral line slightly raised over pectoral fins, otherwise straight, simple.

Colour. — Light yellowish brown uniformly, head slightly lighter in shade. No spots or stripes present.

Distribution. — Syria: in rivers and lakes.

Remarks. — This species is the type species of the genus *Mystus* Scopoli (see JAYARAM, 1962). The popular name *halepensis* (= *aleppensis* of Günther) is replaced by the earlier name *Silurus pelusius* Solander as per Laws of Priority. GÜNTHER (1864: 75) described *Macrones aleppensis* from one of the typical specimens of Russel obtained from River Coie (Aleppo). The specimen examined by me agrees more or less with Günther's description, the slight variations in the body proportions being due to the difference in the size of the specimens. The maxillary barbels is reported to extend to the origin of the adipose fin, but in the specimen under report the barbels are shorter in length; it cannot be definitely stated whether they are cut or damaged.

It is worth recording here that another species *Mystus colvillii* (Günther), also known from Syria, has been treated as a subspecies of *M. pelusius* by HORA and MISRA (1943).

***Chrysichthys duttoni* Boulenger**

Chrysichthys duttoni BOULENGER, *Ann. Mag. nat. Hist.*, (7) 16: 641, 1905 (type locality, Lusambu on river Kasai).—NICHOLS & GRISCOM, *Bull. Amer. Mus. Nat. Hist.*, 38: 711, 1917 (Stanleyville).—JAYARAM, *Bull. Inst. fond. Afr. noire*, 28 (A), No. 3, p. 1081, 1966 (synonymy, distribution).

Specimen studied. — MHNG 1052.91, Talagunga, Ndjole, Gabon, F. Grebert Coll., 72.5 mm. standard length.

Description. — Body depth 5.18; head length 3.15; head width 4.67; head depth 5.57; predorsal length 2.59; postdorsal length 1.61; prepelvic distance 1.88, all in standard length. Eye 4.18 in head length, 0.909 in interorbital space width, 1.63 in snout length. Dorsal spine 1.44, pectoral spine 1.53 in head length. Adipose dorsal fin base longer than anal fin base, 0.91 in proportion. Least depth of caudal peduncle 1.625 in its length. Dorsal fin I, 0, 6; pectoral fin I, i, 6 (damaged); pelvic fin i, 5; anal fin ii, 10; caudal fin 7 + 8 = 15.

Median longitudinal groove on dorsal surface of head, shallow, short, not extending to occipital base. Occipital process short, slightly rugose, 1.5 times longer than broad at base, extending to predorsal plate. Premaxillary band of teeth about 8 times as long as broad; teeth on palate in two patches on either side, very thinly connected in middle; on lower jaw in two deeply curved bands, separated in the middle, all teeth villiform. Maxillary barbels reach $\frac{3}{4}$ pectoral spine, outer mandibular pair pectoral base, inner pair isthmus; all barbels thin, not fleshy; outer and inner mandibular barbels inserted at different levels. Longest ray of dorsal fin just extending to adipose fin when depressed; dorsal spine serrated with five feeble downward facing teeth. Pectoral spine with nine antrorse teeth, along inner edge. Pelvic fins do not reach anal fin. Longest anal ray just extending to caudal fin. Caudal fin deeply forked, lobes equal. Lateral line nearly straight, simple.

Colour. — Brown with a dark hue over head, fins lighter.

Distribution. — ex Belgian Congo: River Kasai, Stanleyville. Gabon: Ndjole.

Remarks. — BOULENGER (1905) described this species from a single specimen 130 mm. long from Kasai river. The specimen under report appears to be the first record of this species subsequent to Boulenger. It is figured here for the first time.

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